

RAW SEQUENCE LISTING
PATENT APPLICATION US/08/117,363DATE: 09/14/93
TIME: 17:25:18

INPUT SET: S388.raw

SEQUENCE LISTING

(1) General Information:

Sec pp. 5 & 7

(i) APPLICANTS: Manoharan, Muthiah
Phillip D. Cook(ii) TITLE OF INVENTION: AMINE-DERIVATIZED NUCLEOSIDES AND
OLIGONUCLEOSIDES

(iii) NUMBER OF SEQUENCES: 23

(iv) CORRESPONDENCE ADDRESS:

(A) ADDRESSEE: Woodcock Washburn Kurtz Mackiewicz
and Norris

(B) STREET: One Liberty Place - 46th Floor

(C) CITY: Philadelphia

(D) STATE: PA

(E) COUNTRY: U.S.A.

(F) ZIP: 19103

(v) COMPUTER READABLE FORM:

(A) MEDIUM TYPE: Floppy disk

(B) COMPUTER: IBM PC compatible

(C) OPERATING SYSTEM: PC-DOS/MS-DOS

(D) SOFTWARE: PatentIn Release #1.0, Version #1.25

(vi) CURRENT APPLICATION DATA:

(A) APPLICATION NUMBER:

(B) FILING DATE:

(C) CLASSIFICATION:

(viii) ATTORNEY/AGENT INFORMATION:

(A) NAME: Lucci, Joseph

(B) REGISTRATION NUMBER: 33,307

(C) REFERENCE/DOCKET NUMBER: ISIS-1169

(ix) TELECOMMUNICATION INFORMATION:

(A) TELEPHONE: 215-568-3100

(B) TELEFAX: 215-568-3439

(2) INFORMATION FOR SEQ ID NO:1:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 11 base pairs

(B) TYPE: nucleic acid

(C) STRANDEDNESS: single

(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: DNA (genomic)

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52
53 (xi) SEQUENCE DESCRIPTION: SEQ ID NO:1:
54
55 GGCTGACTGC G 11
56
57
58 (2) INFORMATION FOR SEQ ID NO:2:
59
60 (i) SEQUENCE CHARACTERISTICS:
61 (A) LENGTH: 20 base pairs
62 (B) TYPE: nucleic acid
63 (C) STRANDEDNESS: single
64 (D) TOPOLOGY: linear
65
66 (ii) MOLECULE TYPE: DNA (genomic)
67
68 (xi) SEQUENCE DESCRIPTION: SEQ ID NO:2:
69
70 CTGTCTCCAT CCTCTTCACT 20
71
72
73 (2) INFORMATION FOR SEQ ID NO:3:
74
75 (i) SEQUENCE CHARACTERISTICS:
76 (A) LENGTH: 20 base pairs
77 (B) TYPE: nucleic acid
78 (C) STRANDEDNESS: single
79 (D) TOPOLOGY: linear
80
81 (ii) MOLECULE TYPE: DNA (genomic)
82
83 (xi) SEQUENCE DESCRIPTION: SEQ ID NO:3:
84
85 TTGCTTCCAT CTCCTCGTC 20
86
87
88 (2) INFORMATION FOR SEQ ID NO:4:
89
90 (i) SEQUENCE CHARACTERISTICS:
91 (A) LENGTH: 18 base pairs
92 (B) TYPE: nucleic acid
93 (C) STRANDEDNESS: single
94 (D) TOPOLOGY: linear
95
96 (ii) MOLECULE TYPE: DNA (genomic)
97
98 (xi) SEQUENCE DESCRIPTION: SEQ ID NO:4:
99
100 TGGGAGCCAT AGCGAGGC 18
101
102

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103 (2) INFORMATION FOR SEQ ID NO:5:
104
105 (i) SEQUENCE CHARACTERISTICS:
106 (A) LENGTH: 20 base pairs
107 (B) TYPE: nucleic acid
108 (C) STRANDEDNESS: single
109 (D) TOPOLOGY: linear
110
111 (ii) MOLECULE TYPE: DNA (genomic)
112
113 (xi) SEQUENCE DESCRIPTION: SEQ ID NO:5:
114
115 CTGTCTCCAT CCTCTTCACT 20
116
117
118 (2) INFORMATION FOR SEQ ID NO:6:
119
120 (i) SEQUENCE CHARACTERISTICS:
121 (A) LENGTH: 16 base pairs
122 (B) TYPE: nucleic acid
123 (C) STRANDEDNESS: single
124 (D) TOPOLOGY: linear
125
126 (ii) MOLECULE TYPE: DNA (genomic)
127
128 (xi) SEQUENCE DESCRIPTION: SEQ ID NO:6:
129
130 TCCAGGTGTC CGCATC 16
131
132
133 (2) INFORMATION FOR SEQ ID NO:7:
134
135 (i) SEQUENCE CHARACTERISTICS:
136 (A) LENGTH: 17 base pairs
137 (B) TYPE: nucleic acid
138 (C) STRANDEDNESS: single
139 (D) TOPOLOGY: linear
140
141 (ii) MOLECULE TYPE: DNA (genomic)
142
143 (xi) SEQUENCE DESCRIPTION: SEQ ID NO:7:
144
145 GGACCGGAAG GTACGAG 17
146
147
148 (2) INFORMATION FOR SEQ ID NO:8:
149
150 (i) SEQUENCE CHARACTERISTICS:
151 (A) LENGTH: 17 base pairs
152 (B) TYPE: nucleic acid
153 (C) STRANDEDNESS: single
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154 (D) TOPOLOGY: linear
155
156 (ii) MOLECULE TYPE: DNA (genomic)
157
158 (xi) SEQUENCE DESCRIPTION: SEQ ID NO:8:
159
160 CCTGGCCTTC CATGCTC 17
161
162
163 (2) INFORMATION FOR SEQ ID NO:9:
164
165 (i) SEQUENCE CHARACTERISTICS:
166 (A) LENGTH: 17 base pairs
167 (B) TYPE: nucleic acid
168 (C) STRANDEDNESS: single
169 (D) TOPOLOGY: linear
170
171 (ii) MOLECULE TYPE: RNA (genomic)
172
173 (xi) SEQUENCE DESCRIPTION: SEQ ID NO:9:
174
175 CCUGGCCUUC CAUGCUC 17
176
177
178 (2) INFORMATION FOR SEQ ID NO:10:
179
180 (i) SEQUENCE CHARACTERISTICS:
181 (A) LENGTH: 12 base pairs
182 (B) TYPE: nucleic acid
183 (C) STRANDEDNESS: single
184 (D) TOPOLOGY: linear
185
186 (ii) MOLECULE TYPE: DNA (genomic)
187
188 (xi) SEQUENCE DESCRIPTION: SEQ ID NO:10:
189
190 CCCAGGCUCA GA 12
191
192
193 (2) INFORMATION FOR SEQ ID NO:11:
194
195 (i) SEQUENCE CHARACTERISTICS:
196 (A) LENGTH: 12 base pairs
197 (B) TYPE: nucleic acid
198 (C) STRANDEDNESS: single
199 (D) TOPOLOGY: linear
200
201 (ii) MOLECULE TYPE: DNA (genomic)
202
203 (xi) SEQUENCE DESCRIPTION: SEQ ID NO:11:
204

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```
205      GAGCUCCCAG GC                      12
206
207
208      (2) INFORMATION FOR SEQ ID NO:12:
209
210          (i) SEQUENCE CHARACTERISTICS:
211              (A) LENGTH: 12 base pairs
212              (B) TYPE: nucleic acid
213              (C) STRANDEDNESS: single
214              (D) TOPOLOGY: linear
215
216          (ii) MOLECULE TYPE: DNA (genomic)
217
218          (xi) SEQUENCE DESCRIPTION: SEQ ID NO:12:
219
220      CAUGCUGCAGCC                      12
221
222
223      (2) INFORMATION FOR SEQ ID NO:13:
224
225          (i) SEQUENCE CHARACTERISTICS:
226              (A) LENGTH: 20 base pairs
227              (B) TYPE: nucleic acid
228              (C) STRANDEDNESS: single
229              (D) TOPOLOGY: linear
230
231          (ii) MOLECULE TYPE: DNA (genomic)
232
233          (xi) SEQUENCE DESCRIPTION: SEQ ID NO:13:
234
235      GCCTTTCGCG ACCCAACACU              20
236
237
238      (2) INFORMATION FOR SEQ ID NO:14:
239
240          (i) SEQUENCE CHARACTERISTICS:
--> 241              (A) LENGTH: 10 base pairs  || are shown
242              (B) TYPE: nucleic acid
243              (C) STRANDEDNESS: single
244              (D) TOPOLOGY: linear
245
246          (ii) MOLECULE TYPE: DNA (genomic)
247
248          (xi) SEQUENCE DESCRIPTION: SEQ ID NO:14:
249
--> 250      GCGTGUCTGCG                      10
251
252      (2) INFORMATION FOR SEQ ID NO:15:
253
254          (i) SEQUENCE CHARACTERISTICS:
255              (A) LENGTH: 18 base pairs
```

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256 (B) TYPE: nucleic acid
257 (C) STRANDEDNESS: single
258 (D) TOPOLOGY: linear
259
260 (ii) MOLECULE TYPE: DNA (genomic)
261
262 (xi) SEQUENCE DESCRIPTION: SEQ ID NO:15:
263
264 UGGGAGCCAT AGCGAGGC 18
265
266 (2) INFORMATION FOR SEQ ID NO:16:
267
268 (i) SEQUENCE CHARACTERISTICS:
269 (A) LENGTH: 18 base pairs
270 (B) TYPE: nucleic acid
271 (C) STRANDEDNESS: single
272 (D) TOPOLOGY: linear
273
274 (ii) MOLECULE TYPE: DNA (genomic)
275
276 (xi) SEQUENCE DESCRIPTION: SEQ ID NO:16:
277
278 TGGGAGCCAU AGCGAGGC 18
279
280
281 (2) INFORMATION FOR SEQ ID NO:17:
282
283 (i) SEQUENCE CHARACTERISTICS:
284 (A) LENGTH: 20 base pairs
285 (B) TYPE: nucleic acid
286 (C) STRANDEDNESS: single
287 (D) TOPOLOGY: linear
288
289 (ii) MOLECULE TYPE: DNA (genomic)
290
291 (xi) SEQUENCE DESCRIPTION: SEQ ID NO:17:
292
293 UCTGAGTAGC AGAGGAGCTC 20
294
295
296 (2) INFORMATION FOR SEQ ID NO:18:
297
298 (i) SEQUENCE CHARACTERISTICS:
299 (A) LENGTH: 21 base pairs
300 (B) TYPE: nucleic acid
301 (C) STRANDEDNESS: single
302 (D) TOPOLOGY: linear
303
304 (ii) MOLECULE TYPE: DNA (genomic)
305
306 (xi) SEQUENCE DESCRIPTION: SEQ ID NO:18:

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307
308 UGCCCAAGCT GGCATCCGTC A 21
309
310

311 (2) INFORMATION FOR SEQ ID NO:19:

312
313 (i) SEQUENCE CHARACTERISTICS:
314 (A) LENGTH: 22 base pairs
315 (B) TYPE: nucleic acid
316 (C) STRANDEDNESS: single
317 (D) TOPOLOGY: linear
318

319 (ii) MOLECULE TYPE: DNA (genomic)

320
321 (xi) SEQUENCE DESCRIPTION: SEQ ID NO:19:

322
323 UGCGTTTGCT CTTCTTCTTG CG 22
324
325

326 (2) INFORMATION FOR SEQ ID NO:20:

327
328 (i) SEQUENCE CHARACTERISTICS:
329 (A) LENGTH: 20 base pairs
330 (B) TYPE: nucleic acid
331 (C) STRANDEDNESS: single
332 (D) TOPOLOGY: linear
333

334 (ii) MOLECULE TYPE: DNA (genomic)

335
336 --> (xi) SEQUENCE DESCRIPTION: SEQ ID NO:19:

337
338 UGCATCCCCC AGGCCACCAT 20
339
340

341 (2) INFORMATION FOR SEQ ID NO:21:

342
343 (i) SEQUENCE CHARACTERISTICS:
344 (A) LENGTH: 20 base pairs
345 (B) TYPE: nucleic acid
346 (C) STRANDEDNESS: single
347 (D) TOPOLOGY: linear
348

349 (ii) MOLECULE TYPE: DNA (genomic)

350
351 (xi) SEQUENCE DESCRIPTION: SEQ ID NO:21:

352
353 UCCCGCCTGT GACATGCATT 20
354
355

356 (2) INFORMATION FOR SEQ ID NO:22:

357

RAW SEQUENCE LISTING
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358 (i) SEQUENCE CHARACTERISTICS:
359 (A) LENGTH: 20 base pairs
360 (B) TYPE: nucleic acid
361 (C) STRANDEDNESS: single
362 (D) TOPOLOGY: linear
363
364 (ii) MOLECULE TYPE: DNA (genomic)
365
366 (xi) SEQUENCE DESCRIPTION: SEQ ID NO:22:
367
368 GUTCTCGCTG GTGAGTTTCA 20
369
370
371 (2) INFORMATION FOR SEQ ID NO:23:
372
373 (i) SEQUENCE CHARACTERISTICS:
374 (A) LENGTH: 19 base pairs
375 (B) TYPE: nucleic acid
376 (C) STRANDEDNESS: single
377 (D) TOPOLOGY: linear
378
379 (ii) MOLECULE TYPE: DNA (genomic)
380
381 (xi) SEQUENCE DESCRIPTION: SEQ ID NO:23:
382
383 UUGGGAGCCA TAGCGAGGC 19
384

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SEQUENCE VERIFICATION REPORT
PATENT APPLICATION US/08/117,363

DATE: 09/14/93
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INPUT SET: S388.raw

Line	Error	Original Text
241	Entered (10) and Calc. Seq. Length (11) differ	(A) LENGTH: 10 base pairs
250	# of Sequences for line conflicts w/ running total	GCGTGUCTGCG 10
336	Wrong Sequence Number	(xi) SEQUENCE DESCRIPTION: SEQ ID NO:19:

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SEQUENCE MISSING ITEM REPORT
PATENT APPLICATION US/08/117,363

DATE: 09/14/93
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APPLICATION NUMBER
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PRIOR APPLICATION DATA

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SEQUENCE CORRECTION REPORT
PATENT APPLICATION US/08/117,363

DATE: 09/14/93
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INPUT SET: S388.raw

Line	Original Text	Corrected Text
5	(i) APPLICANTS: Manoharan, Muthiah	(i) APPLICANT: Manoharan, Muthiah